Statistics Jersey

Births & breastfeeding 2019

Statistics Jersey: www.gov.je/statistics

Summary

In 2019:

- there were 890 live births in Jersey[1], corresponding to a crude birth rate (CBR) of 8.3 per 1,000 resident population[2]
- the number of live births was the lowest annual total since 1983 and the crude birth rate was the lowest since at least 1950
- the total fertility rate (TFR) over the three-year period 2017-2019 was 1.32 births per woman[3] and was the lowest recorded since at least 2001-2003
- the 30-34 year age group of women had the highest age-specific fertility rate
- the proportion of mothers aged 35 years and over at delivery has increased from around one in four (24%) in 2001 to one in three (33%) in 2019
- the proportion of births by caesarean section (33%) was similar to that recorded in each year of the previous two decades and was greater in Jersey than in England (27%)[4]
- 3% of newborn term babies in Jersey were classified as 'low' birthweight[5], similar to England
- three-quarters (75%) of babies were being breastfed at discharge from maternity care; by 6-8 weeks this proportion was 58%; and at the 1-year check almost one in four (23%) babies were receiving breastmilk
- over the period 2016-2018 infant mortality in Jersey was 2.4 deaths per 1,000 live births in infants under one year of age, a similar rate to that in England

Introduction

This report constitutes the latest collection of births and breastfeeding statistics for Jersey and presents data for the calendar year 2019. The information presented is derived primarily from the hospital computer system TRAK and the child health CAREPLUS database server (see Notes).

The information presented includes:

- number of births
- crude birth rate (CBR) and total fertility rate (TFR)
- age of mother at delivery
- age-specific fertility rates
- rates of caesarean section
- birth weight
- breastfeeding patterns
- infant mortality

[1] Details of births refer to all births in Jersey including babies born off-Island to Jersey resident mothers and who subsequently transfer back. These details will differ slightly to the information collected by the Superintendent Registrar who complies details of all babies registered on-Island.

[2] Throughout this report, all population figures (such as the total resident population and the numbers of females in each age-group) have been estimated using Statistics Jersey's population projections: https://www.gov.je/government/pages/statesreports.aspx?reportid=2370

[3] Total fertility rate (TFR) refers to the total number of children born to a woman in her life time.

[4] Public Health England (PHE) Child and Maternal Health March 2020: https://fingertips.phe.org.uk/profile/child-health-profiles

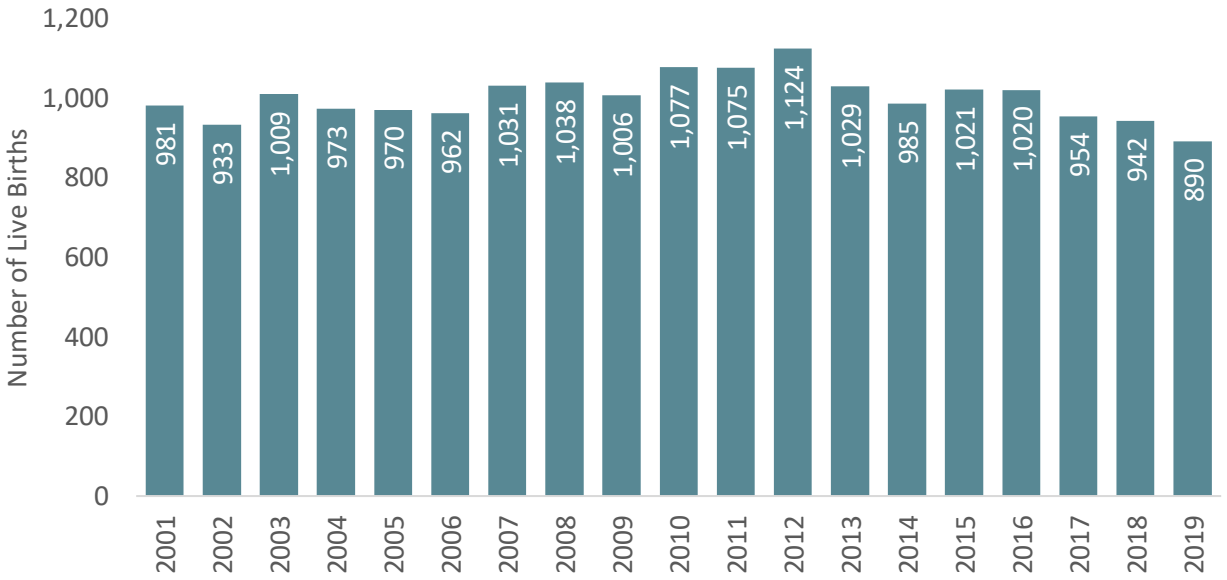
[5] Live births with a recorded birth weight under 2500g and a gestational age of at least 37 complete.

Births

In 2019:

- there were 890 live births in Jersey, representing the lowest annual total since 1983[6]
- the number of live births has declined by a fifth (21%) since the latest peak seen in 2012

Figure 1: Number of births per year, 2001-2019



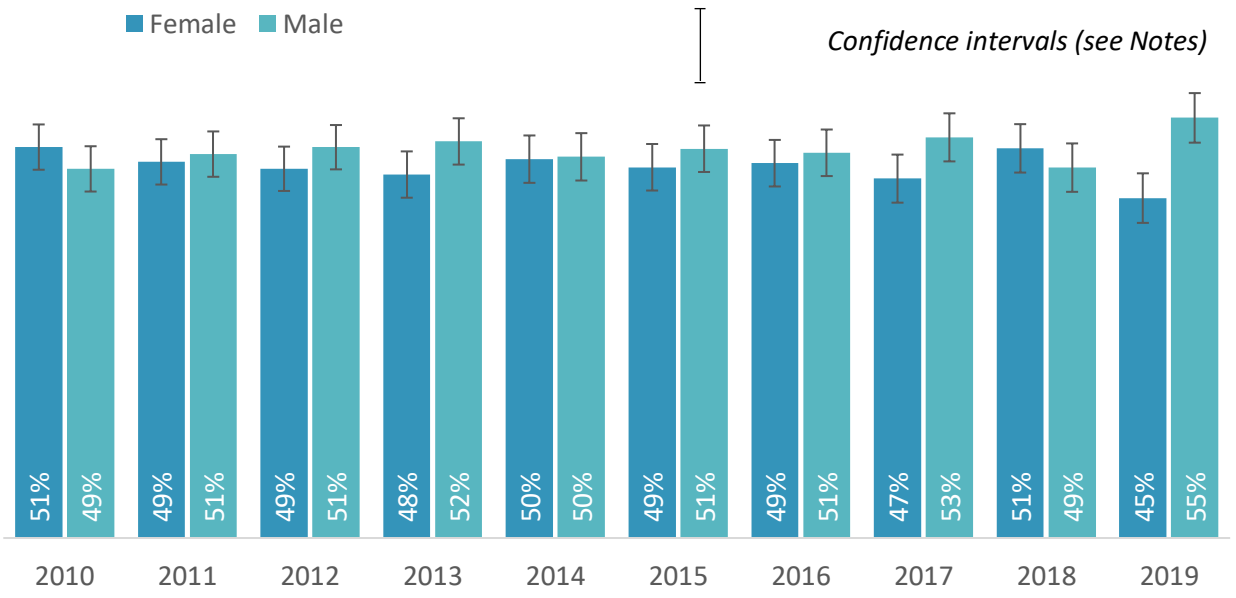
Source: Trak / Careplus 2001-2019

Sex of baby at birth

In 2019:

- there were 492 live births of males and 398 live births of females
- in 2019 the proportion of live male births (55%) was significantly higher than that of females (45%); over the last decade, whilst there have been fluctuations in the actual numbers of boys and girls born each year, the relative proportions have been statistically similar (see Figure 2)

Figure 2: Percentage of annual births by sex, 2010-2019



Source: Trak / Careplus 2001-2019

[6] Historical data from the Jersey Medical Officer for Health and the Office of the Chief Economic Adviser.

Crude birth rate

The crude birth rate (CBR) is defined as the number of live births in a year per 1,000 resident population.

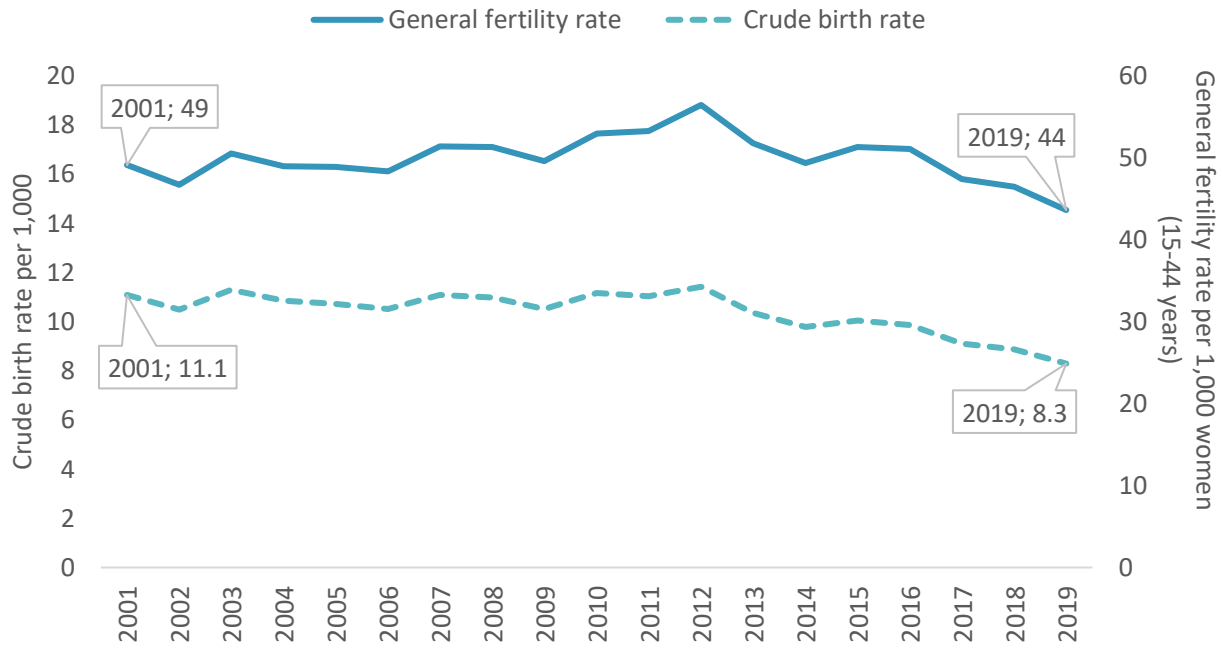
- the crude birth rate in Jersey in 2019 was 8.3 live births per 1,000 residents, representing the lowest CBR recorded in the Island since at least 1950[7]
- over the last two decades, the CBR in Jersey has decreased from 11.1 per 1,000 residents in 2001 to 8.3 per 1,000 in 2019 (Figure 3)
- the crude birth rate in England in 2018 was 11.1 live births per 1,000 total population[8], and was the lowest CBR recorded for England since at least 1938[7]; for comparison, the CBR in Jersey in 2018 was 8.9 live births per 1,000 residents

General fertility rate

The general fertility rate (GFR) is defined as the number of live births in a year per 1,000 women in the population who are aged 15-44 years[9]. The GFR is a more considered way to measure fertility than the crude birth rate because the general fertility rate is not affected by changes in the size of sub-groups of the population which generally would not bear children (e.g. pensioners).

- there were 44 births for every 1,000 women of childbearing age in Jersey in 2019
- the GFR for Jersey over the last two decades shows similar behavior to the CBR (see Figure 3)
- for comparison, the GFR in England was 60 per 1,000 women of childbearing age in 2018

Figure 3: General fertility rate and crude birth rate in Jersey, 2001-2019



Source: Trak / Careplus 2001-2019

Total fertility rate

The total fertility rate (TFR) refers to the total number of children born to a woman in her life time if she were subject to the current rates of age-specific fertility in the population. The TFR is affected both by the number of children women have across their child-bearing years as well as the specific timing. The TFR will decline if women start having fewer children overall, and it will also decline if women generally start delaying child-bearing to later years. Similarly, a rise in TFR would result from women having more children and/or women moving towards having children earlier in their life.

[7] Historical data from the Jersey Medical Officer for Health and the Office of the Chief Economic Adviser.
[8] UK Office for National Statistics: Births in England and Wales, 2018
[9] For the calculation of GFR on an internationally comparable basis, child-bearing age is defined as 15 to 44 years.

Table 1 shows the details of the calculation of the TFR in Jersey for the three-year period 2017-2019 [10]:

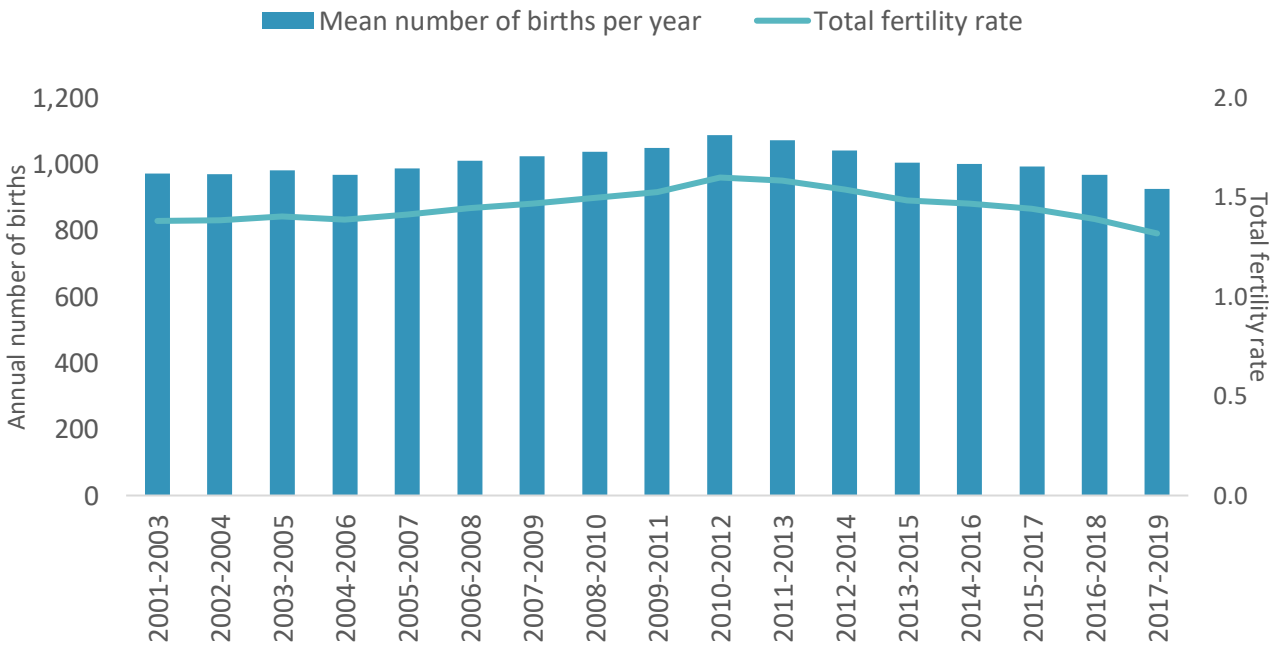
- the TFR in Jersey during the period 2017-19 was 1.32 births per woman, equivalent to 1,320 births per 1,000 women
- the TFR in Jersey in 2017-19 was the lowest since at least 2001-3 (see Figure 4)
- between 2004-2006 and 2010-2012 the total fertility rate (TFR) in Jersey had increased from 1.39 to 1.60 and has since decreased
- in England the TFR has declined from 1.94 in 2012 to 1.70 children per woman in 2018[11]

Table 1: Calculation of the total fertility rate (TFR) for Jersey, 2017-2019

Age of women (years)	Estimated number of women in age group	Births to women in age group*	Age specific birth rate = births to women in age group / number of women in age group
15-19	8,390	40	0.004
20-24	8,830	220	0.024
25-29	10,400	570	0.054
30-34	10,600	1,070	0.101
35-39	11,360	710	0.062
40-44	11,060	190	0.018
		Sum	0.264
		TFR = Sum x 5	1.318

**the small number of births to women aged 45 years and over are included in the number of births to women aged 40-44 years*

Figure 4: Mean number of live births and total fertility rate (TFR) in Jersey, three-year periods; 2001-03 to 2017-19



Source: Trak / Careplus 2001-2019

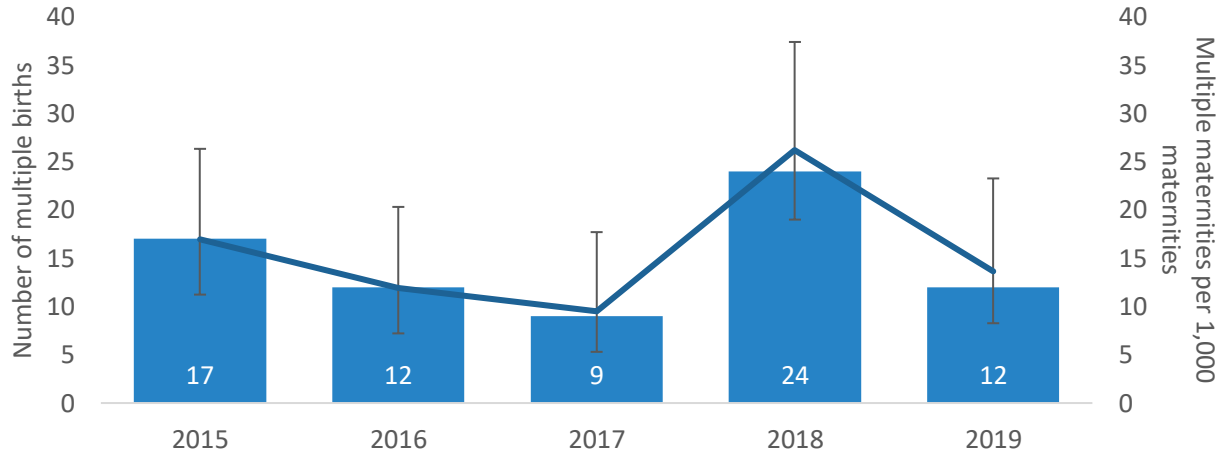
[10] Births data for the most recent three-year time period (2017-2019) are aggregated in order to ensure sufficiently large numbers at lower and higher ages of mother.

[11] [11] UK Office for National Statistics: Births in England and Wales, 2018

Multiple births

- 12 mothers in Jersey had a multiple birth in 2019 compared to 24 in 2018 (see Figure 5); 24 children were born as part of a multiple birth (twins, triplets etc.) in 2019 compared to 50 children in 2018
- the rate of multiple births in Jersey was 13.7 per 1,000 births in 2019

Figure 5: Number of multiple live births and multiple birth rate per 1,000 maternities, 2015-2019



Source: Trak / Careplus 2001-2019

Delivery statistics

In 2019:

- 50 births (6% of all live births) occurred before 37 weeks gestation and were classed as **preterm**
- 54% of all live births were first births; 35% were second births; and 10% were third or later births
- 21% of first live births were to mothers aged 25-29 years; 39% were to mothers aged 30-34 years; and (22%) were to mothers aged 35-39 years

Age of mothers at delivery

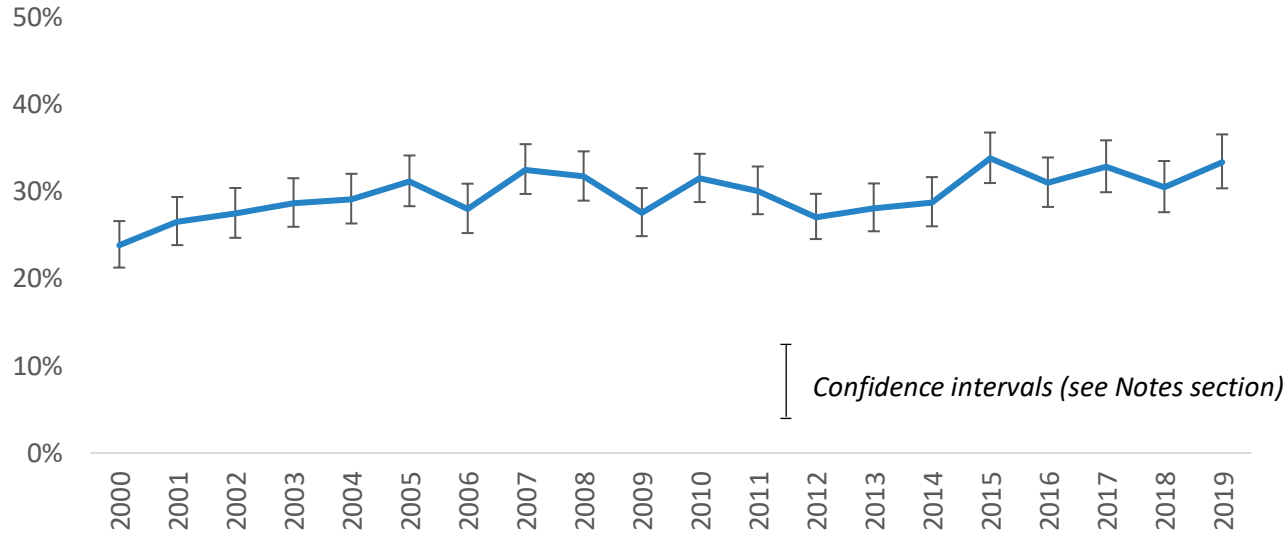
- an increase of around 1 year of age has been recorded over the last decade in the mean average age of mothers giving birth in Jersey, from 31.4 years in 2009 to 32.5 years in 2019; in England and Wales the mean age of women at childbirth was 30.6 years in 2018[12]
- similarly, an increase of around 1 year of age has been recorded in the mean average age of women having a first birth in Jersey over the last decade, from 30.7 years in 2009 to 31.8 years in 2019; in England and Wales in 2018 the mean age of first-time mothers was 28.9 years
- the median age of women at childbirth in Jersey in 2019 was 32.8 years, up from 31.6 years in 2009
- 1.3% of all births in Jersey during the three-year period 2017-2019 were to women under 20 years of age, a similar proportion to that recorded in 2000-2002
- the proportion of women aged 20 to 29 years giving birth in Jersey has declined from 34% in 2000-2002 to 28% in 2017-2019
- the proportion of women aged 30 years and over giving birth in Jersey has increased from 58% in 2000-2002 to 64% in 2017-2019

Mothers aged 35 years and over

- the proportion of mothers giving birth aged 35 years and over in Jersey has increased from around a quarter (24%) in 2000 to one in three (33%) in 2019 (see Figure 6)
- the proportion of mothers giving birth aged 35 and over in England (22%) in 2017-18[13] was lower than in Jersey in 2018 (31%)

[12] Births that occurred in England and Wales in the given calendar year; the figures are compiled from information supplied when births are registered as part of civil registration. See www.ons.gov.uk, Birth characteristics in England and Wales: 2018
[13] Public Health England (PHE) Child and Maternal Health updated March 2020, available from: https://fingertips.phe.org.uk/profile/child-health-profiles

Figure 6: Proportion of mothers in Jersey aged 35 years and over at the time of birth, 2000-2019



Source: Trak / Careplus 2001-2019

Table 2 shows the proportion of mothers aged 35 years and over at delivery in Jersey, the EU and selected European countries for 2018 (the year for which comparable data is most recently available).

- Jersey had a higher proportion of mothers aged 35 years and over at delivery than the EU average, Poland, the UK and Germany; and a lower proportion than Portugal, Ireland and Spain

Table 2: Proportion of mothers aged 35 years and over at time of birth European countries and Jersey, 2018

Country	Proportion of mothers aged 35 years and over; %
Poland	21.1
UK	26.1
EU average	28.0
Germany	28.1
Jersey	30.5
Portugal	36.1
Ireland	42.4
Spain	43.7

Source: Statistics Jersey and WHO Europe Region[14]

Teenage mothers (aged 17 years and under)

- since 2000 there has been a mean average of 5 births per year in Jersey to mothers aged 17 years and under
- the mean average number of births to mothers aged 17 years and under in Jersey has decreased from 7 per year during the decade 2000-2009 to 4 per year over the period 2011-2019
- during the five-year period 2015-2019, 0.3% of births in Jersey were to mothers aged 17 years and under; in England in 2018/19, 0.6% of births were to teenage mothers aged 17 years and under[15]

[14] Eurostat Data Explorer, Live births by mother's year of birth (age reached) and birth order, available from: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_fordagec&lang=en
[15] Public Health England (PHE) Child and Maternal Health updated March 2020, available from: https://fingertips.phe.org.uk/profile/child-health-profiles

Adolescent mothers (aged 19 years and under)

The World Health Organisation defines adolescent births as births to mothers aged 19 years and under[16]. Table 3 shows the comparative figures for the proportion of births to adolescent mothers in Jersey, the EU and selected European countries.

- Jersey had a similar proportion of births to adolescent mothers as in Ireland, and a lower proportion than the EU average, Germany, Spain, Poland, Portugal, Poland and the UK

Table 3: Proportion of births to adolescent mothers (aged 19 years and under), European countries (2018) and Jersey (2016-2018)

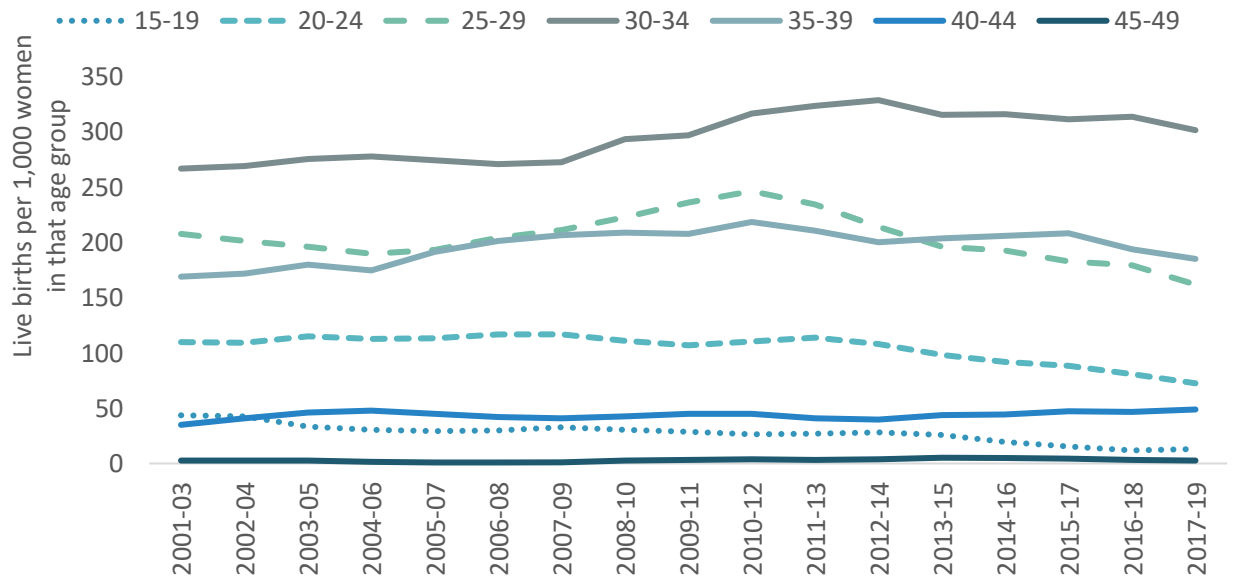
Country	Percentage of mothers under 20 years of age
Jersey	1.1
Ireland	1.1
Germany	1.4
Spain	1.5
Poland	1.7
Portugal	1.8
EU average	1.9
UK	2.1

Note: Jersey data is for three years due to small numbers: Source: Statistics Jersey and WHO Europe Region[17]

Age-specific fertility rates[18]

- since 2001-03, the 30-34 years age group has the highest age-specific fertility rate in Jersey
- fertility rates of women aged under 29 years have decreased since 2010-12

Figure 7: Age-specific fertility rates (three-year averages) in Jersey, 2001-03 to 2017-2019



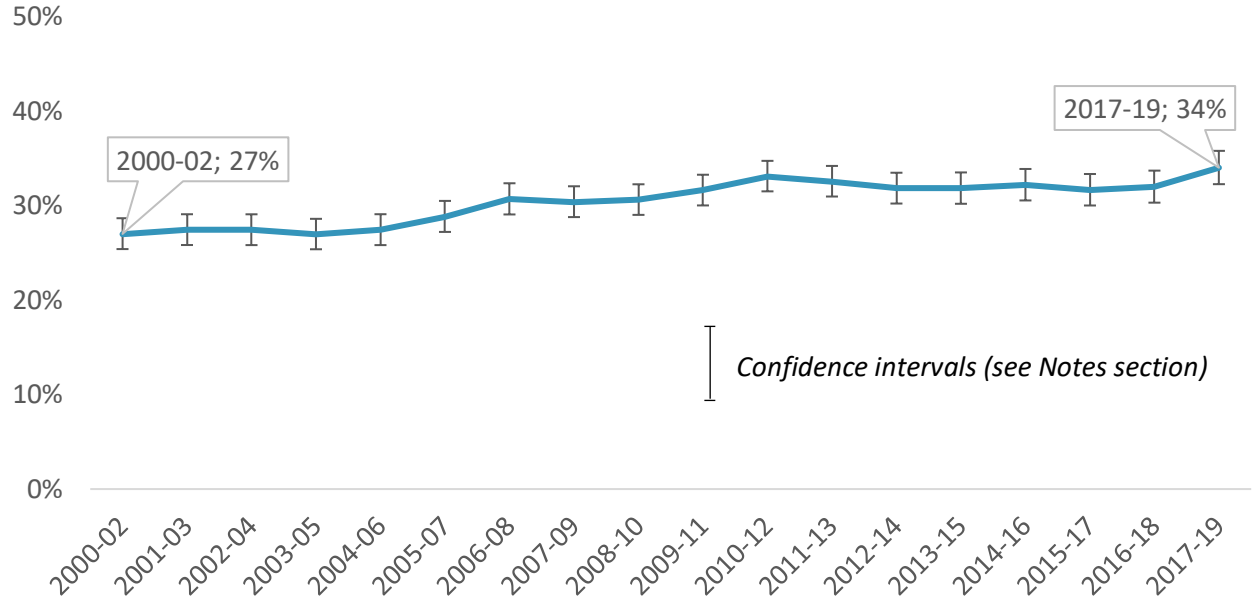
Source: Trak / Careplus 2001-2019

[16] World Health Organisation, *https://apps.who.int/adolescent/second-decade/section2/page1/recognizing-adolescence.html*
[17] Eurostat Data Explorer, Live births by mother's year of birth (age reached) and birth order, available from: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_fordagec&lang=en
[18] The age-specific fertility rate (the fertility rate by age of mother) is the number of births to mothers of age *x* expressed as a proportion of the female population of age *x*.

Caesarean sections

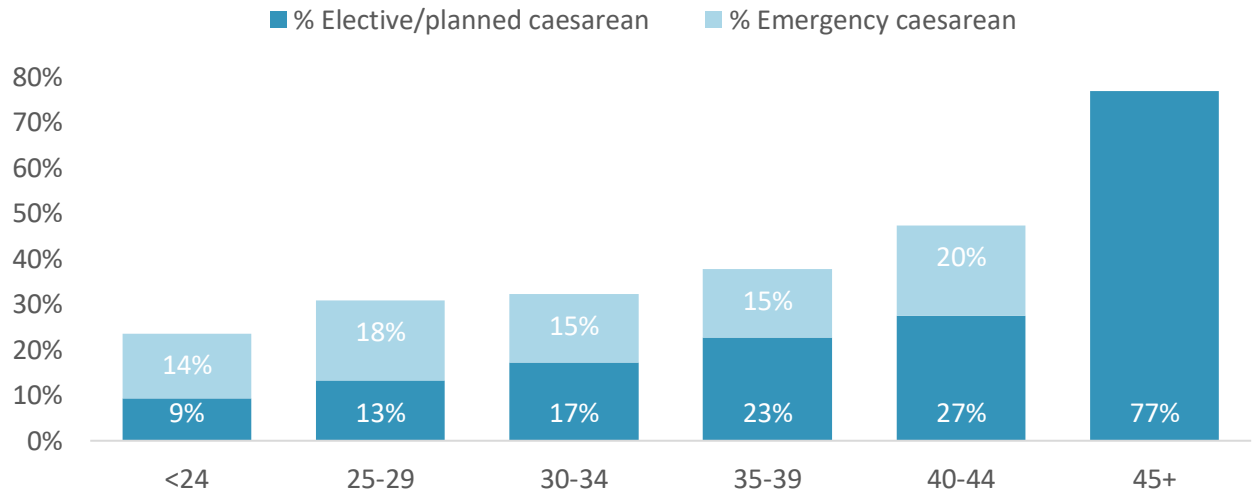
- during the three-year period 2017-2019 a third (34%) of all deliveries in Jersey were by caesarean section[19]; a sixth (16%) of all deliveries were delivered by an emergency caesarean[20] (see Figure 8)
- the proportion of caesarean births in Jersey has increased over the last two decades, from 27% in 2000-02 to 34% in 2017-2019
- the proportion of caesarean births in Jersey in 2017-19 (34%) was significantly higher than in England (27% of births in 2016-2017[21])

Figure 8: Proportion of women giving birth by caesarean section in Jersey, 2000-2002 to 2017-2019



Source: Trak / Careplus 2001-2019

Figure 9: Proportion of women giving birth by caesarean section, by age of mother, In three-year period 2017-2019



Source: Trak / Careplus 2001-2019

[19] Prior to 2015 and again in 2018, information on caesarean sections was recorded on the child health system. In 2016 and 2017 caesarean information was no longer recorded on the child health system and information was taken from the TRAK system. This data only records numbers of caesarean sections, not numbers of live births. For these two years, the percentage was calculated by dividing the number of Caesarean sections recorded on TRAK by the number of mothers giving birth to live babies

[20] A caesarean section is the surgical delivery of a baby through the mother's abdomen. If labour has started and complications begin, an emergency caesarean section may be performed.

[21] Public Health England (PHE) Child and Maternal Health updated March 2020, available from: https://fingertips.phe.org.uk/profile/child-health-profiles

During the latest three-year period:

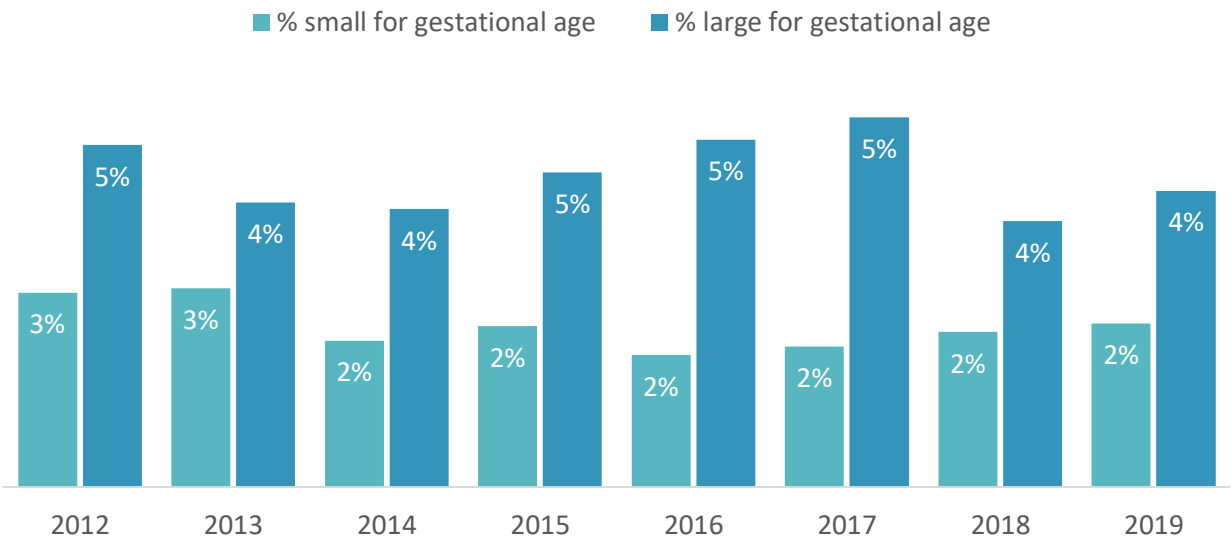
- the proportion of caesarean deliveries in Jersey increased with the age of the mother. Caesarean births accounted for: almost a quarter (24%) of deliveries by women aged 24 years and under; a third (34%) of deliveries by women aged between 25 and 39 years; and for almost half (49%) of deliveries by women aged 40 years and over – see Figure 9
- around one in eight (13%) mothers in Jersey aged 25-29 years delivered by an elective or planned caesarean, a smaller proportion than for mothers aged 35-39 years (23%) and 40-44 years (27%),

Birth weight

A baby's weight at birth can be influenced by several factors, including: gestational age at which the child is born; the health of the mother, particularly during pregnancy; and genetics. In 2019:

- 2% of all newborns in Jersey were classified as being small for gestational age (birthweight below the 5th centile for weight[22]) – see Figure 10
- 4% of all newborns (around 40 babies) were large for gestational age (above the 95th centile for weight)
- 5% of all newborns (around 50 babies) were classified as being of low birthweight[23]; fewer than 10 of these babies were recorded as being of very low birthweight[24] at the time of delivery
- among babies born at full term, 20 babies (2%) were classified as low birthweight[25], a similar proportion to that seen in England (3%)

Figure 10: Proportion of all newborns who were small or large birthweight for gestational age, 2012-2019



Source: Trak / Careplus 2001-2019

Apgar score

Medical professionals assess the Apgar score for a baby at five minutes after birth by scoring the baby between zero and two for each of five criteria (Appearance, Pulse, Grimace, Activity and Respiration) and summing to give a score between zero and ten. A score of seven or above is considered normal, and a score below seven is regarded as low. In Jersey during the period 2017-2019, of the 97% term babies with an Apgar score recorded, around 40 (corresponding to 1%) had a score below seven, a similar proportion to England in 2018-2019.

[22] Jersey gestation and birth weight data is compared to the gender specific World Health Organisation British 1990 birth cohort
[23] Low birthweight is a term used to describe babies who are born weighing less than 2500g.
[24] Very low birthweight is a term used to describe babies who are born weighing less than 1500g.
[25] Live births with a recorded birth weight under 2500g and a gestational age of at least 37 complete.

Smoking

- 8% of women were recorded as being a current smoker at their booking appointment[26]

As part of the 6-8 week check of new-borns, the risk of exposure to second-hand smoke is assessed by GPs.

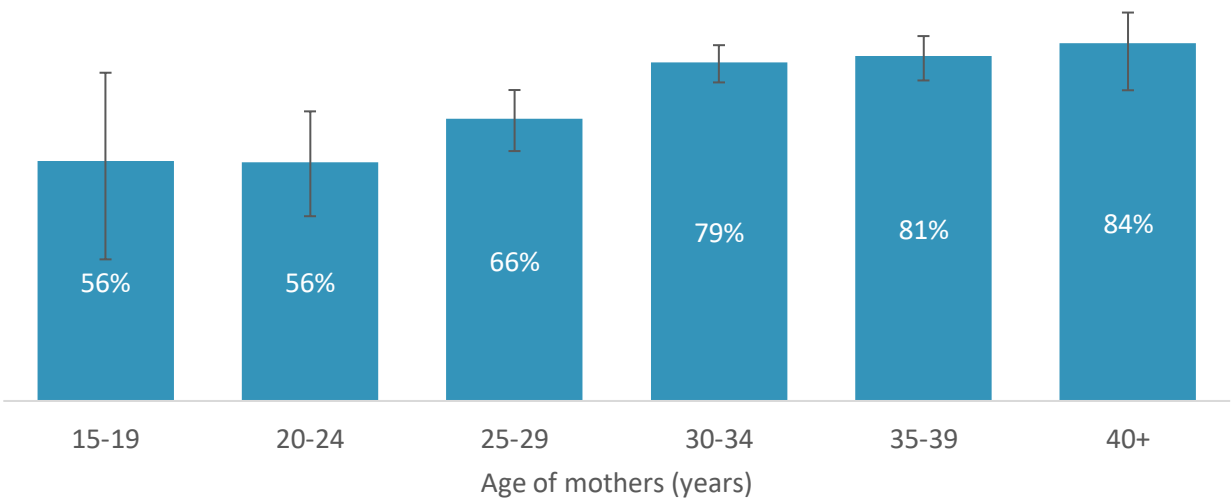
- around one in six (17%) of all babies born in 2018 were living in a household where they were likely to be exposed to tobacco smoke by an adult

Breastfeeding patterns

Breastfeeding at discharge[27]

- three-quarters (75%) of babies were being breastfed at discharge from maternity in 2019, a similar proportion to that seen in each year since 2010
- 57% of mothers were exclusively breastfeeding (babies receiving breast milk only) and a further 19% were mixed feeding (babies receiving both breast and formula milk)
- at discharge, breastfeeding rates of mothers aged 20-29 years were significantly lower than those of mothers aged 30 years and over (see Figure 11)
- the proportion of mothers breastfeeding at discharge in Jersey in 2019 was similar to the proportion breastfeeding at initiation in England in 2016-17 (74%)

Figure 11: Proportion of mothers in Jersey who were breastfeeding at discharge by age of mother, 2019



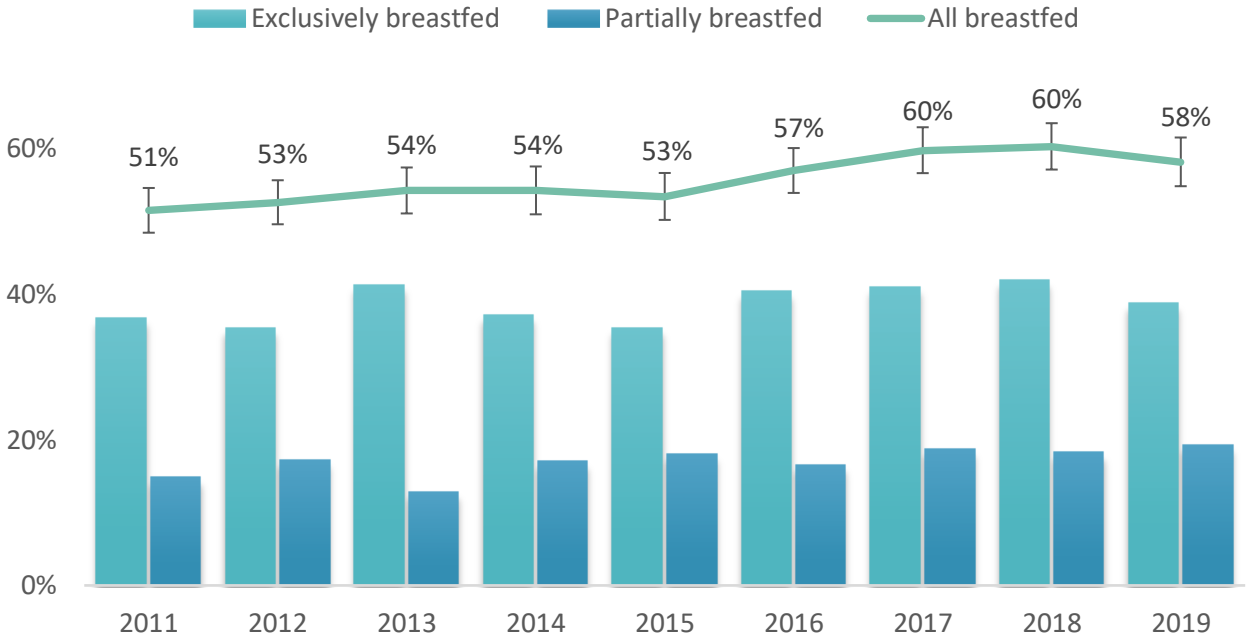
Source: Trak / Careplus 2001-2019

Breastfeeding at 6-8 weeks[28]

- in 2019, the proportion of mothers who were breastfeeding at 6 to 8 weeks after birth was 58%, comprising 39% breastfeeding exclusively and a further 19% partially - see Figure 12
- the proportion of babies receiving mixed breastfeeding at 6 to 8 weeks old has been essentially unchanged since 2011
- Jersey (58%) was higher than in England (46%) in 2018-2019[29]

[26] The booking appointment is the first official antenatal appointment and will usually happen when the mother is between 8 and 12 weeks pregnant.
[27] Breastfeeding at birth is the proportion of mothers who give their babies breastmilk soon after delivery, and was the measure used from 2010 to 2014. From October 2015, mothers in Jersey have been assessed on whether they were breastfeeding on discharge, a change from the previous assessment of 'feeding initiated at birth' which was defined as the 48 hours following delivery. In practice, these two definitions of breastfeeding at birth are very similar.
[28] When a baby is six to eight weeks old, the doctor (GP) will examine him/her at the GP surgery. This is known as the six-week check.
[29] Public Health England (PHE) Child and Maternal Health updated March 2020, available from: https://fingertips.phe.org.uk/profile/child-health-profiles

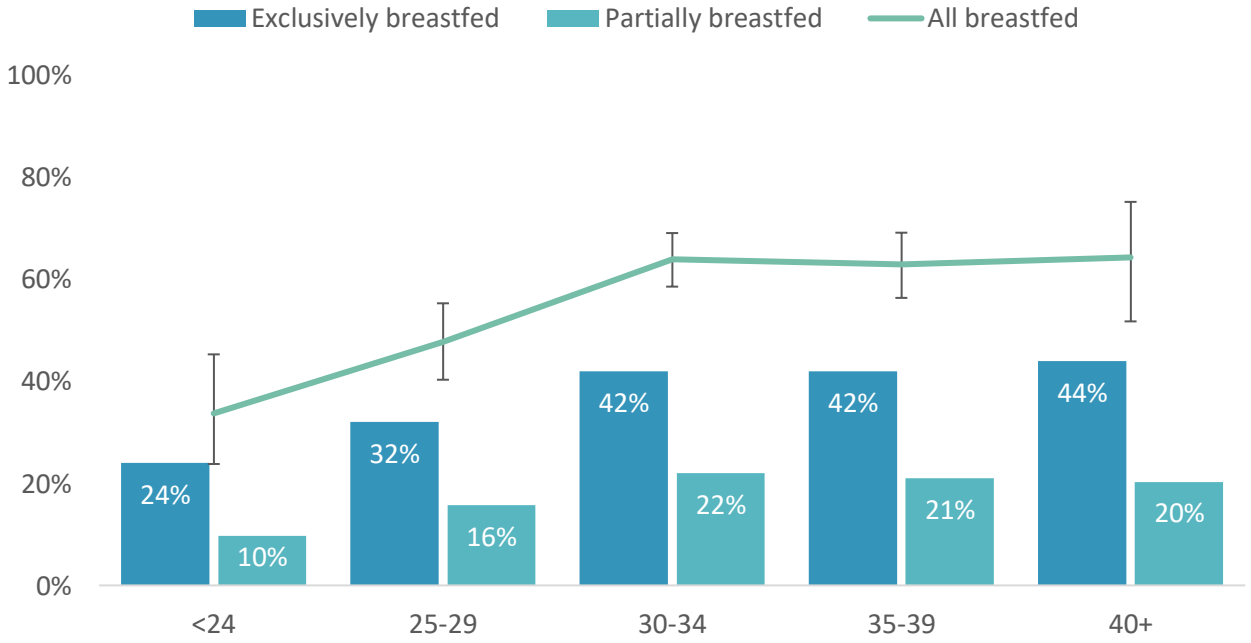
Figure 12: Proportion of babies who were breastfed at 6-8 weeks after birth, 2011-2019



Source: Trak / Careplus 2001-2019

- breastfeeding rates at 6 to 8 weeks were lower among mothers aged 24 years and under (32%) than mothers aged 30 years and over (62%), - Figure 13

Figure 13: Proportion of babies who were breastfed at 6-8 weeks after birth, by age of mother, 2019



Source: Trak / Careplus 2001-2019

Breastfeeding at 12-month developmental assessment[30]

- around 830 developmental checks were carried out by Family Nursing and Home Care health visitors in 2019 (at baby's age of between 9 and 15 months); a 'feeding status' was recorded for 820 of babies
- almost a quarter of children (23%) were being breastfed at the 12-month developmental assessment
- almost a fifth of children (19%) were exclusively receiving breastmilk, with a further 4% receiving a combination of breast and formula milk

[30] 12-month developmental assessments are offered for children up to 15 months of age.

Hospital admissions

- around 640 children aged four years and under were admitted each year, on average, to hospital for emergency medical care during the period 2017-2019
- the average number of individual infants (under one year of age) admitted to hospital for emergency medical care was around 150 per year, corresponding to an average of 1.3 visits per child
- 14% of admissions of infants aged under one year of age were primarily due to infections of the respiratory tract, corresponding to a rate of 255 admissions per 10,000 infant population per year; this rate is significantly lower than that for England (625 admissions per 10,000 infant population)
- 3% of admissions for infants under one year of age were primarily due to gastroenteritis; corresponding to an admission rate for gastroenteritis of 61 per 10,000 infant population per year, a significantly lower rate than seen in England (177 per 10,000 population)

Stillbirths[31]

- there were a total of 25 stillbirths in Jersey during the ten-year period 2009-2018

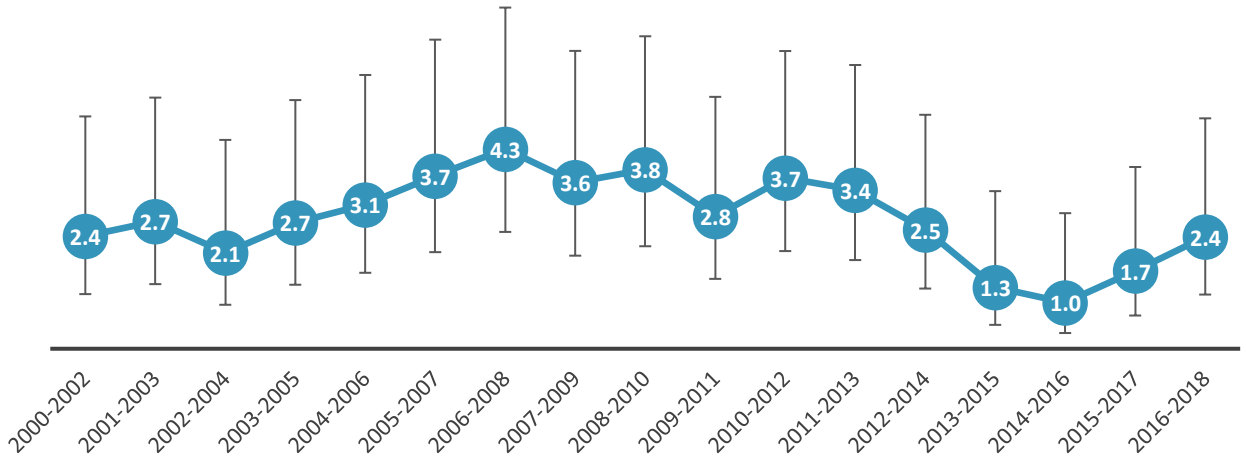
Neonatal deaths[32]

- there were a total of 15 neonatal deaths in Jersey during the ten-year period 2009-2018

Infant mortality[33]

- there were fewer than 10 infant deaths (under one year of age) registered in Jersey during the three-year period 2016-2018
- the infant mortality rate in Jersey was 2.4 deaths per 1,000 live births during the three-year period 2016-2018, a similar rate to that seen since 2000 (Figure 14)
- during the decade 2009-2018, 89% of all deaths of children under five years of age occurred within the first year of life
- the infant mortality rate in Jersey is similar to that in England (3.9 per 1,000 live births[34] in 2016-18)

Figure 14: Infant mortality rate in Jersey per 1,000 live births (three-year average), 2000-02 to 2016-2018



Source: Trak / Careplus 2001-2019

Deaths of children under 5 years of age

- there were fewer than 10 deaths to children under five years of age in Jersey during the three-year period 2016-2018

[31] Stillbirth is the delivery, after the 20th week of pregnancy, of a baby who has died.
[32] Neonatal deaths are babies who were born after 24 weeks' gestation who died in their first 28 days of life.
[33] Infant mortality is defined as all deaths occurring within the first year of life. The number of infants who die each year in Jersey is subject to variation from year to year; the data is therefore presented on a three-year rolling average basis.
[34] Public Health England (PHE) Child and Maternal Health updated March 2020, available from: https://fingertips.phe.org.uk/profile/child-health-profiles

Notes

Data Sources

- All babies born in Jersey are offered a six-week check by a GP to check the baby's development. Babies are then seen again by a Family Nursing and Health Care (FNHC) health visitor at a child health clinic for a 12-month developmental assessment
- Birth and breastfeeding data (up to and including the six-week check) comes from the Child Health System which is administered by the Preventative Programmes, Child Health Team. This system monitors a child's development and immunisation history throughout their childhood. Statistics Jersey extracts data from this system for statistical purposes. Data on breastfeeding is also gathered by the Maternity Unit through TRAK (hospital patient healthcare information system), and/or by GPs.
- Data on caesarean sections comes from the Child Health System, together with data from the hospital system TRAK.
- Information on breast-feeding at the 12-month developmental assessment is provided by FNHC
- Data on hospital admissions is taken from the hospital computer system TRAK. Admissions data are classified using the International Classification of Diseases (ICD-10); each admission can have up to 20 diagnosis fields which provide the reasons why the patient was admitted to hospital.
- Figures on infant mortality uses information from the notifications and registrations reported by Parish Registrars to the Superintendent Registrar, as required by the Marriage and Civil Status (Jersey) Law 2001.

Confidence intervals

Confidence intervals and statistical significance

Confidence intervals have been used in this report to compare Jersey mortality rates and hospital admission rates with those of England. Confidence intervals are a measure of the statistical precision of an estimate and show the range of uncertainty around the estimated figure. The confidence interval indicates the range within which the true value for the population as a whole can be expected to lie, taking natural random variation into account.

Comparisons between rates or over time have been tested to determine whether differences are likely to be statistically significant or the result of natural random variation. Only those differences deemed as statistically significant have been described in this report using terms such as 'increase', 'decrease', 'higher' or 'lower'.